

# Highway 17 Bicycle & Pedestrian Feasibility Study

Complete Streets and Transportation Commission Meeting

> July 9th, 2020 7:30 A.M

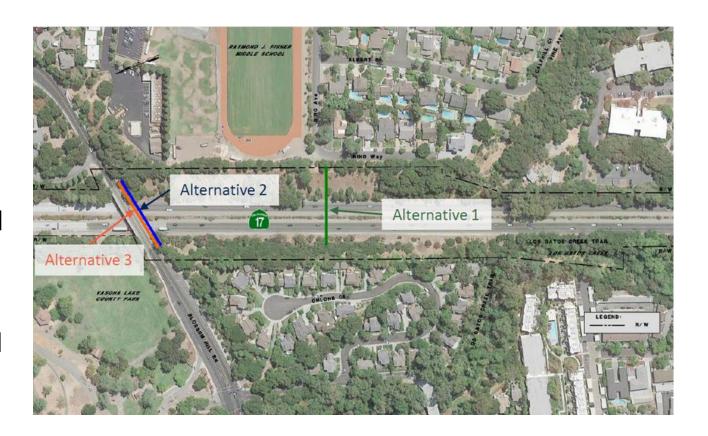




### ORIGINAL ALTERNATIVES



- Alternative 1 A new bicycle and pedestrian bridge connecting to Nino Avenue
- Alternative 2 A separate bicycle and pedestrian bridge along Blossom Hill Road
- Alternative 3 Widening the existing Blossom Hill Road Bridge for bicyclists and pedestrians

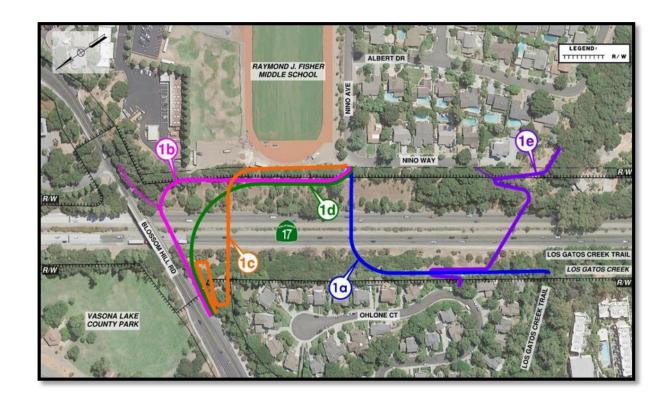




## INITIAL ALIGNMENT SCREENING



- 1a. Los Gatos Creek Trail Connector to Nino Ave A perpendicular crossing that provides a direct connection between Los Gatos Creek Trail on the west side and Nino Way on the east side.
- **1b. Blossom Hill Rd Skewed Connector to Nino Ave** A skewed main span crossing with a point of connection at Blossom Hill Rd to the West and Nino Way to the East. Additionally, the option of a second connection to East Blossom Hill Rd was studied, and is shown in the Figure.
- 1c. Blossom Hill Rd Perpendicular Connector to Nino Ave A perpendicular main span crossing that provides the same points of connection as Alternative 1b (with the exception of the optional second landing along East Blossom Hill Rd). A switchback alignment is required along the west approach to provide enough distance to conform to existing grades along Blossom Hill Rd with a profile grade of 5% or less that meets ADA requirements.
- **1d. Blossom Hill Rd Curved Connector to Nino Ave** A curved main span crossing that provides the same points of connection as Alternative 1c.
- **1e. Ohlone Ct Connector to Pine Ave** A skewed main span crossing that connects Ohlone Ct with Pine Ave. The option of a second connection to Nino Ave was studied, and is shown in the Figure.
- **2. Blossom Hill Rd Separate Bridge** (Pictured in Figure 11) provides a second parallel crossing with Blossom Hill Rd for bicyclists and pedestrians.
- **Blossom Hill Rd Bridge Widening –** (Pictured in Figure 11) widens the existing Blossom Hill Rd Bridge for bicyclists and pedestrians.



## **Evaluation Criteria**

- Community Feedback
- Caltrans Coordination
- Origin/Destination Study
  - Existing travel patterns
  - Future demand (how well will the improvements serve the different user groups and destinations)
- User Experience
- Utility Impacts
- Right of Way Impacts
- Geotechnical Considerations
- Environmental Constraints (Trees, Visual, etc)
- Cost





## FEASIBLE ALTERNATIVES – Nino Avenue

ALTERNATIVES	BENEFITS	CONSIDERATIONS
	Provides connection to Los Gatos Creek Trail Greatest Design Flexibility Horizontal alignment is more direct of a connection to Nino Way Required vertical clearance can easily be achieved. Pier in Highway 17 median may not be required Safe and direct route to Fisher Middle School with connection at Nino Ave. Better user experience with a separated Class 1 BPOC.	Introduces a visual obstruction and privacy issue to the residents of Ohlone Ct. Incorporate mitigation measures such as railings, downward or dimmed lighting, sound barriers and or privacy screening. Modification to existing sound walls at the Los Gatos Creek Trail and along Highway 17 would need to occur.
The state of the s	<ul> <li>Maintains existing bike and pedestrian traffic patterns on the West side of Blossom Hill Road</li> <li>Safe and direct route to Fisher Middle School with connection at Nino Ave.</li> <li>Better user experience with a separated Class 1 BPOC.</li> </ul>	<ul> <li>Potential right of way impacts on East side.</li> <li>Slightly constrains future Blossom Hill Road widening</li> <li>Changes bike and pedestrian traffic patterns on East side.</li> </ul>
TO TO THE RESIDENCE AND THE RE	<ul> <li>Maintains existing bike and pedestrian traffic patterns on the West side of Blossom Hill Road</li> <li>Safe and direct route to Fisher Middle School with connection at Nino Ave.</li> <li>Better user experience with a separated Class 1 BPOC.</li> </ul>	Potential right of way impacts on East side. Slightly constrains future Blossom Hill Road widening Changes bike and pedestrian traffic patterns on East side. Impacts to Ohlone Ct. residences similar to Alternative 1A. More costly due to longer route. Tight radii create potential conflict points for bicyclists and pedestrians



## FEASIBLE ALTERNATIVES – Blossom Hill

ALTERNATIVES	BENEFITS	CONSIDERATIONS
2 Proper ser	Potential to provide a two-way Class I facility  Allows for sidewalk removal on south side of Blossom Hill Road and would provide the following:  Room for wider existing vehicular lanes  Room for a Class IV westbound bike lane in addition to BPOC  Provides greater user experience than Alternative 3 with the BPOC separated from vehicles	Limits Future Widening Options due to proximity to existing Blossom Hill Road Bridge      Additional modifications will be necessary for a two-way path at the conforms on Blossom Hill Road      Aesthetic limitations due to adjacent bridge. A more intricate bridge design may visually conflict with the existing Bridge.
Alexand Assault	The Least initial construction cost is anticipated with this alternative.  Allows for sidewalk removal on south side of Blossom Hill Road and would provide the following:  Room for wider existing vehicular lanes  Room for a Class IV westbound bike lane.	<ul> <li>Limits future widening options greatly due to overlap with the existing bridge.</li> <li>Vetical clearance is limited to existing Blossom Hill Road Profile.</li> <li>Greatly reduced Aesthetic options due to adjacent bridge.</li> </ul>





## SECTION ALTERNATIVES

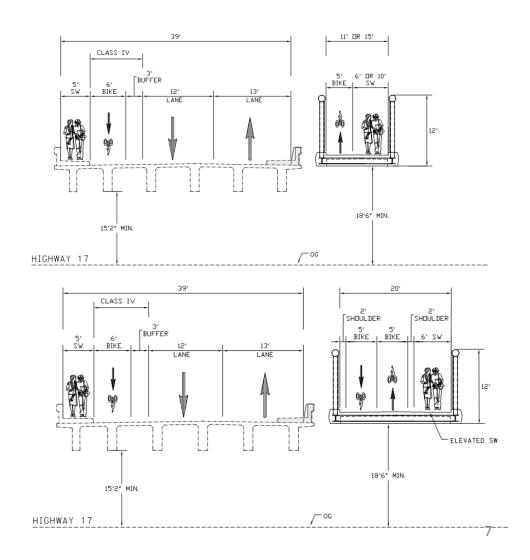


#### Narrow Cross-Section

- One-way EB Class 1 Bike Path with sidewalk.
- Overall width is reduced providing less impacts to trees and adjoining intersections.

#### Wide Cross-Section

- Two-way Cycle Track with sidewalk.
- Provides redundant option for WB bicyclists.
- Potential shoulder separations for enhanced bicycle experience or wider sidewalk for enhanced pedestrian experience.



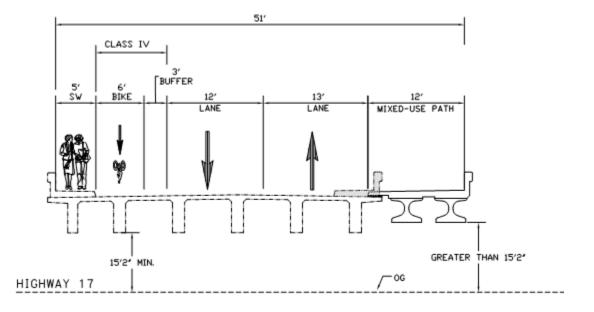


## SECTION ALTERNATIVES



#### Traditional Cross-Section

- 12' mixed-use pathway along the south side.
- Creative and Economical solution to Project's purpose and need, but requires Caltrans approval due to Nonstandard Design Features.
- Throwaway Costs when/if Caltrans replaces the existing structure.
- Overall width is reduced providing less impacts to trees and adjoining intersections.



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## Preferred Alternative – Blossom Hill





User Group/Direction	Options
Bicyclists: Eastbound	Use the Bicycle and Pedestrian Overcrossing
Bicyclists: Westbound	Ride on the Class IV Bike Lane on the existing Blossom Hill Road Bridge; or cross to the south side to use the Bike and Pedestrian Overcrossing
Pedestrians: both directions	Use Existing Sidewalk on the north side of Blossom Hill Road Bridge; or walk on the Bike and Pedestrian Overcrossing



## PROFILE AND IMPACTS





- Proposed bridge profile is roughly 6' higher than existing Blossom Hill Road towards east end of bridge.
- Wider Bridge more potential impacts to existing trees and mitigation.

## **Project Milestones**





## Feasibility Study and Future Phases

Milestone	Schedule
Preliminary Evaluation	January - March, 2020
Outreach Round 1 – Initial Screening	February 2020
Town Council confirmed two alternatives	March 3, 2020
Outreach Round 2	August 2020
Town Council considers preferred alternative	September 1, 2020
ATP Application for Construction Dollars	September 15, 2020
Final design	Early 2021 - August 2023
Advertise Construction	November 2023
Award Contract	January 2024
Construction (pending funding availability)	February 2024 – December 2025

